

Complacencies That Arise in an Established Sales and Operations Planning (S&OP) Process

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Introduction

In today's business world, being able to align supply and demand across the different business functions is vital to cutting costs and ensuring acceptable levels of service in the supply chain. Increasingly, this alignment is achieved through building and maintaining an effective sales and operations planning process, or S&OP. S&OP is a process of tactical planning to ensure a company's competitive advantage, based on the continuous integration of client-oriented marketing planning and supply chain management (Adamczak). This alignment is achieved through a cadence of regular meetings, during which S&OP team members work together to build a demand plan from which to base production, logistics and marketing strategies. However, S&OP can be a very complicated process. Problems such as lack of investment from senior leadership, failure to measure and monitor progress, and office politics are just some of the ways that the process can be derailed (Bower). While these overarching problems have been well documented in the academic and practitioner literature, much of this existing work is focused on implementation of the S&OP process, and the steps necessary to make it functional. The focus of this proposed research, however, is to explore issues in sales and operations planning processes that are already implemented and have become a functional part of the business plan, specifically in regards to the annual meetings. The main focus is to identify common barriers across different supply chains that lead to unsatisfactory S&OP outcomes post-implementation. This will hopefully identify issues that arise when a company becomes complacent with the existing process that can lead to negative outcomes in the form of time wasting, misalignment of objectives, or personnel disillusionment.

The next section will identify relevant existing research related to S&OP and provide a brief summary, as well as how the information will be used. This will be followed by a section that outlines my approach for finding an answer to my research question. After this the methodology will be outlined, which will include establishing definitions for the key variables in the study and data acquisition methods utilized to collect insights regarding the research question. We will then present how the data was analyzed, the results of the analysis and potential future research opportunities.

Literature Review

A large amount literature on the sales and operations planning process already exists. It was upon these previous works that the research idea for this project was formulated. Toumikas and Kaipia (2014) analyze existing literature pertaining to sales and operations planning and provide a perspective from which to base future research. The authors explored 99 articles and analyzed them based on two perspectives, a top down approach to create a general conceptual framework of coordination mechanisms that mapped against the extant literature, and a bottom-up and concept centric approach. Based on these perspectives they identified six relevant coordination mechanisms for S&OP; S&OP organization, tools and data, performance management, strategic alignment, and S&OP culture and leadership. This paper also discovered that in recent years there has been an increase in articles related to S&OP showing the environment is reacting to the challenges posed in the S&OP process.

This literature review helped to define the current climate of sales and operations planning. It identified a number of issues that are commonly seen in the industry as well as

identified research that has been recently conducted. A better understanding of the industry was provided through reading this article as well as a better understanding of potential avenues of research. It also provides a framework for analyzing case studies which is a source of data that could be potentially beneficial to help me address my research question. After having read the this comprehensive literature review, it became apparent that much of today's research focuses on the implementation of S&OP processes and where the implementation effort succeeds and/or fails.

Patrick Bower identifies how companies fail in sales and operations planning in his article, "12 Most Common Threats to Sales and Operations Planning Process." Bower based these points on data that was collected from development and implementation initiatives for clients ranging from small to large firms. He then identified the most common issues that impacted the firm's ability to maximize value from S&OP and puts forth strategies to prevent the issues from arising. This article helped to give an idea for the problems that arise in S&OP processes and gave a basis from which to base research. This article provides a broad observational view of the landscape of issues associated with S&OP, as well as a more industry viewed perspective.

Adamczak highlights the differences of sales and operating planning across firms of different sizes. The research sets off to discover if there is a relationship between a company's size and the structure of S&OP and a process for its preparation. This article extended ideas from Bower's piece by showing how the issues presented in his article, could be compounded or mitigated by the firm's size. Data was collected through a questionnaire containing both open and closed questions. Based off the data collected it was determined that the number of

different elements identified in S&OP as well as the organizational aspects would be dependent on company size and position within the supply chain. The results of the research were that small companies did not find it necessary to implement S&OP due to the lack of complexity from a smaller range of work. However, medium sized companies did find this work necessary due to a larger range of work that required more personnel to communicate to be effective. This article helped to identify the type of firm that would be best suited to for the specific research presented in this paper based on company size and position within the supply chain.

Based on these pieces, it was determined that a larger firm would be more suited to the current research due to the added complexity of their S&OP processes. This article also provided a methodology for the current research by providing an example of the type of data interviews with company employees can provide as well as setting a framework for how to structure these interviews.

After exploring the literature on potential effects that company size could have on S&OP, an examination of potential industry-specific effects was conducted. This potential effect was studied in an article by Ivert, Dukovska-Popovska, Fredrikson, Dreyer and Kaipia (2015). The first step these researches took was to review previous literature to set the parameters followed by determining planning environment variables in relation to product, demand and supply and then explored their effects on S&OP set up. Based on their findings, the authors concluded that companies are aligning S&OP according to the planning environment of their industry. The main environmental factors that they found to be particularly impactful were uncertainty connected to demand and material supply, frequent product launches, and product network complexity. The main finding from this article is that there is evidence of the need for

S&OP to adjust to the environment. The article also used unstructured interviews that provide a point of reference for the unstructured interviews in this research's data collection.

Sales and operating planning, when implemented successfully by a company, can create a considerable competitive advantage. However, implementing a S&OP process can be complicated and requires participation from multiple business functions. For this reason, the current research focuses specifically on exploring issues in sales and operations planning processes that are already a functional part of the business plan. Specifically, on exploring issues in sales and operations planning processes in regards to the annual meetings that drive the process. There will then be unstructured interviews that provide the necessary data that can be used to identify a theoretical explanation for these issues.

Methodology

Data were gathered through interviews with members of industry that have implemented S&OP processes. The plan was to find at least five companies with whom to conduct unstructured interviews. From these companies, interviews were sought with key members of their S&OP teams (marketing, operations, sales, etc.). The companies that were interviewed were all consumer packaged goods companies of medium size (approximately \$1 billion revenue).

The questions were formatted into five main questions that were then accompanied by sub questions that were used to further the discussion to gain deeper insights. Below are the main questions along with sub-questions that accompany them.

- Can you describe a typical S&OP meeting for you as well as define your role within the meeting?
 - Size of meetings, what departments are represented
 - Average length
 - Do members come well prepared to meetings
 - Do people miss meetings, how often
 - What, in your opinion, is the most vital S&OP objective
 - Tendencies to be more supply or demand focused
- What, if any aspects of S&OP meetings would you identify as the largest issues facing the productivity of the meeting.
- Are the meetings typically dominated by one person, team leader, or is there relatively equal input from team members.
 - One individual may lead but is there opportunities for others to present their perspective.
 - Do all team members seem equally enthusiastic to achieve S&OP goals and reduce gaps?
- Is source data universally trusted
 - Do members regularly question bullish demand forecasts, pessimistic supply promises, etc.
- Do members leave meeting feeling confident about the final plan.
 - Believe plan is achievable
 - Trust plan not to change more frequently than capability, cost structure allows.

- Leave feeling aware of the challenges faced by their peers
- Is there evidence that the S&OP process has clearly contributed to improved business results. (Revenue, Innovation, Profit, Volume, Customer Service, ROIC, Inventory Performance, Costs and Asset Utilization)

My first step in analyzing the data was to transcribe the data. From this transcription, I conducted a content analysis. In this content analysis I developed categories based on reoccurring themes from the interviews. Since I planned to create the categories post interviews I did thematic coding. The steps for this process are defined in our textbook as:

- (1) Define the recording unit (word, phrase, sentence, and paragraph)
- (2) Define the coding categories
- (3) Test the coding by applying it to a sample of your collected data
- (4) Assess the accuracy and reliability of this sample coding (perhaps using multiple coders to check for intercoder consistency)
- (5) Revise the coding rules and/or instructions to improve consistency and accuracy in coding
- (6) Return to step 3 and run the cycle until you achieve sufficient consistency and accuracy in coding
- (7) Code all data
- (8) Assess overall consistency and accuracy of the codings

I will then determine what categories are most prevalent and provide supporting examples from the interviews through memoing. Memoing is the theoretical write up of the

ideas identified through coding as well as identifying any relationships. These memos will build categories that will be indicative of issues that are frequently seen as roadblocks in the S&OP process.

Analysis and Results

I was able to interview six members of the sales and operations function across five different companies and have compiled the following results based on my analysis of their responses. Of the responses provided by the interviewees, the most common themes that emerged were focused on issues with data confidence, a general sense of over optimism and a lack of managerial patience were the main limiting factors to an efficient S&OP processes.

Issue 1: Data Confidence

The respondents indicated that having the right level of confidence in the data being used in the S&OP process is important to help them understand how the company is positioned against their plan which allows for more informed decision making. This confidence is often achieved through data visibility. Visibility can be defined as a company's ability to identify key metrics when needed and for these metrics to be accurate. The issue that the level of visibility that was realized was less than optimal was identified in all five of the interviews. This issue arose predominately through new technologic implementation as well as new product acquisitions. One interviewee stated,

"We implemented a new ERP (enterprise resource planning) system and we lost a lot of our visibility and our base foundation and we really took a step back"

Not being confident in the data can lead to questioning of the S&OP plan as well as disenchantment from key members of the process. One respondent said,

“If you don’t keep on the process, oftentimes people will let it drift, let it go”

This reflects the idea that if data integrity isn’t maintained people lose confidence and ultimately interest in the process. The data gathered in the initial steps of S&OP is the bedrock from which decisions arise in later stages and not having confidence in the data leads to poor, misinformed decisions.

Issue 2: Over Optimism

Another issue is that members of the S&OP team can have a tendency to be overly optimistic. This is not an issue in and of itself, as one of sales and operations planning’s main focuses is to eliminate these types of biases. However, when they are not fixed, they can lead to larger issues. One interviewee identified this problem by saying,

“It probably to a certain extent plays out in every company; you tend to, in general, be optimistic about a sales plan and as you fall behind you tend to think you’re going to catch up. So you miss one month and add it on to subsequent months which can lead to a bull whip effect.”

A further problem that arises out of this optimistic mind set is that members tend to be happy with results despite not knowing how they arrived there. This can mean that demand forecast can be met, but meeting members do not look back to see if this was caused by the effect of the promotional plan that was supposed to increase demand or some unforeseen outside factor.

“People can be happy with their meeting plan in total but not understand the wider implications.”

This can disrupt future plans as actual factors that have been shaping the plan, but were unidentified, surface.

Issue 3: Lack of Managerial Patience

Subjects also identified a lack of patience from management to be an issue within the S&OP process.

“When you become an executive you have a lot of experience and expertise and you like to make decisions and I think that S&OP requires some trust and faith that the process will provide benefit, and some people don’t have the patience to sit through a four-hour meeting and take the time to understand the numbers.”

Managers are the key driving force behind developing and sustaining an effective S&OP process and without their buy-in the process will not perform to expectations. The S&OP process cumulates in an executive meeting where executives are presented information from the different business functions and then a plan is created to complement the business strategy. These meetings can be lengthy and can last for a few hours. If executives are not invested in this process, the issues that are created in the executive meeting can poison all pre-executive meetings and really have a negative impact on the process. One area in particular that it is easy for executives to lose interest in is the problems presented by business units that they are not in control of.

“There is a lack of excitement for some of the more silo’d issues. For example, a lot of the financial or sales people aren’t too interested in hearing operations discuss their slow move inventory”

While these issues may not be important for every member of the meeting, they are important in the context of S&OP to understand how the plan has effected the business as a whole.

Managerial Implications

Based on my research I identified two areas that would potentially be the most helpful at combating the identified issues. The first would be in the company culture, especially in regards to the managerial level. The second area would be in company data tools and systems. I propose that continuous training in these two areas would help to make employees more resistant to the issues I have found.

Company culture plays a big factor in how effectively a sales and operations process performs. It is imperative that the managers driving the process are bought into the process and invested in continuously promoting its success. Boyer identifies this as being a key foundation when first implementing the process in a company in his article “10 proven steps to successful S&OP.” While companies may do a good job at putting the right people into S&OP roles during implementation, it is important that people that fill positions later on also have the same traits. One respondent stated during their interview, “you have to reset every now and then as the names change and there is always some level of drift.” This reflects that it is important to check that employees involved have the correct training and mentality to ensure efficiency in S&OP.

Another way to combat the issues found above is through the use of data systems and tools. Today’s business world is very much driven by big data and it is easier to have access to many different types of metrics. However, it is important for people to understand these

metrics and where they are taken from. Enterprise resource planning systems have connected employees to data more effectively than ever before but it is still important for employees to understand where the data originates, especially when dealing with metrics presented by other business units. By understanding this data, they can prevent over confidence as well as better identify when metrics might be wrong.

Future Research

If I was to continue this research, the next step would be to do a statistical analysis on issue sheets that are created during the S&OP process. I would question what the most documented issues are surrounding the forecast, specifically in regards to biases and unidentified variables that effect sales forecasts. I would also question During the pre-meeting stage of the S&OP process issue sheets are created to record issues in the process and put them in a format that is easily presented at the meetings. Collecting these from multiple companies over the course of a year would give a larger sample of issues that are documented during the process and what business silo they fall under.

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